AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A circuit comprising:

a diode;

a first transistor coupled in series with the diode;

a first resistor coupled in series with the transistor;

a second transistor having a control node coupled to a control node of the first transistor and coupled to a node between the first transistor and the first resistor;

a second resistor coupled in series with the second transistor;

a first branch of a current mirror coupled in parallel with the second transistor and the second resistor;

a third resistor coupled in series with the second resistor; and

a third transistor coupled in series with the second transistor.

~~a bias generator circuit coupled to the second transistor and coupled to the second resistor; and~~

~~wherein the bias generator circuit comprises:~~

~~a first branch coupled to the second transistor and coupled to the second resistor; and~~

~~a second branch coupled to the first branch by current mirrors.~~

2. (Cancelled) The circuit of claim 1 further comprising a bias generator circuit coupled to the second transistor and coupled to the second resistor.

3. (Cancelled) The circuit of claim 2 wherein the bias generator circuit comprises:

a first branch coupled to the second transistor and coupled to the second resistor; and

a second branch coupled to the first branch by current mirrors.

4. (Cancelled) The circuit of claim 2 wherein the bias generator circuit includes a third resistor coupled between the second resistor and a voltage supply node.

5. (Cancelled) The circuit of claim 1 wherein the first branch includes a third resistor coupled between the second resistor and a voltage supply node.

6. (Original) The circuit of claim 1 wherein the first and second transistors are bipolar transistors.

7. (Original) The circuit of claim 1 wherein the first and second transistors are PNP bipolar transistors.

8. (Currently Amended) A circuit comprising:

a constant voltage drop device;

a first transistor coupled in series with the constant voltage drop device;

a first resistor coupled in series with the transistor;

a second transistor having a control node coupled to a control node of the first transistor and coupled to a node between the first transistor and the first resistor;

a second resistor coupled in series with the second transistor;

a first branch of a current mirror coupled in parallel with the second transistor and the second resistor;

a third resistor coupled in series with the second resistor; and

a third transistor coupled in series with the second transistor.

~~a bias generator circuit coupled to the second transistor and coupled to the second resistor; and~~

~~wherein the bias generator circuit comprises:~~

~~a first branch coupled to the second transistor and coupled to the second resistor; and~~

~~a second branch coupled to the first branch by current mirrors.~~

9. (Cancelled) The circuit of claim 8 wherein the constant voltage drop device is a diode.

10. (Cancelled) The circuit of claim 8 further comprising a bias generator circuit coupled to the second transistor and coupled to the second resistor.

11. (Cancelled) The circuit of claim 10 wherein the bias generator circuit comprises:

a first branch coupled to the second transistor and coupled to the second resistor; and

a second branch coupled to the first branch by current mirrors.

12. (Cancelled) The circuit of claim 10 wherein the bias generator circuit includes a third resistor coupled between the second resistor and a voltage supply node.

13. (Cancelled) The circuit of claim 8 wherein the first branch includes a third resistor coupled between the second resistor and a voltage supply node.

14. (Original) The circuit of claim 8 wherein the first and second transistors are bipolar transistors.

15. (Original) The circuit of claim 8 wherein the first and second transistors are PNP bipolar transistors.